

Remarks

Claims 1 – 15 and 18 are pending herein and are subject to rejection. The Examiner is requested to enter and consider this response even though presented after final rejection.

The Examiner has rejected claims 1-6, 10, 15 and 18 under 35 U.S.C § 103(a) as being unpatentable over US 5716901 to Fenderson et al. (Fenderson) in view of Banks et al. Applicants respectfully traverse.

With respect to Fenderson, the Examiner suggests that one of ordinary skill in the art would have been motivated to substitute glyphosate into the 3-way formulation taught by Fenderson. Applicants dispute this suggestion.

More specifically, Fenderson teaches, *inter alia*, a herbicide composition comprising dimethenamid and at least one other herbicide (column 1, line 17-18). Fenderson provides substantial boilerplate of examples of possible other herbicides – column 2 lines 6 to column 3 line 30 – which includes reference to triketones (column 2, line 11). Fenderson goes on to teach that the co-application of the combination of dimethenamid and triketone(s) or dione(s) according to the present invention is especially suitable in crops of monocotyledons, such as cereals, maize and rice (column 6 lines 52-55). Example 4 teaches a maize field, infested with various weed species, which is sprayed with a tank-mix suspension of dimethenamid, sulcotrione and atrazine.

Thus, it can be seen from the teaching of Fenderson that three way mix of dimethenamid, a triketone and atrazine is actually only envisaged with regard to (selective) weed control in monocotyledon crops. One of ordinary skill would understand this to be the case as each of the three herbicidal components are known selective herbicides used to control weeds in, for example, maize – as supported by the specific example provided by Fenderson.

Banks, on the other hand, teaches glyphosate as a post-emergence treatment for Johnsongrass control in cotton and soybeans. Treatments were made either "over-the-top" (topical) of the crop plants or directed to the base of the stems. However, Banks further teaches that "glyphosate at 0.8 kg/ha used postemergence topically on cotton and soybeans caused significant visual injury (emphasis added) and crop yield reduction". Banks indicates that crop damage could be reduced if glyphosate was applied basally to the stem.

As mentioned above - the Examiner suggest that one of ordinary skill in the art would have been motivated to substitute glyphosate (for atrazine) into the exemplified 3-way formulation taught by Fenderson.

However, it should be appreciated that Fenderson and Banks relate to completely different problems. More particularly, Fenderson is concerned with methods for controlling weeds in monocotyledon crops such as corn – which is solved by post-emergence “over the top” application of a three way mix of corn selective herbicides. Banks is concerned with methods of controlling weeds in a dicotyledon crops such soybean and cotton – which is solved using basal application of a non-selective herbicide (glyphosate).

Accordingly, it is submitted that contrary to the Examiner’s assertion – the person of ordinary would not be motivated to substitute glyphosate for atrazine in the combination taught by Fenderson in view of Banks as the two references relate to different problems. In addition – it should be appreciated that Fenderson teaches a tank-mix (over the top) application of the herbicidal composition. However – Banks teaches that over the top applications of glyphosate results in significant visual injury of the crop plant. Thus – Banks actually teaches away from the solution offered by the present invention – and it is submitted that one of ordinary skill would have no reasonable expectation that glyphosate could be substituted for atrazine in the combination taught by Fenderson because – in doing so – Banks would suggest injury to the crop plant would result.

Accordingly – in view of the above analysis it is submitted that the present invention is not *prima facie* obvious in view of the teachings of Fenderson in view of Banks. Reconsideration and withdrawal of the § 103 rejection of claims 1 – 6, 10, 15 and 18 are respectfully requested.

The Examiner has further rejected claims 1, 5 11-14 and 18 under 35 U.S.C § 103(a) as being unpatentable over US 6365550 to Feucht et al. (Feucht) in view of the Armel et al. publication (Armel). Applicants respectfully traverse.

The Examiner suggests that Feucht teaches a synergistic herbicidal composition comprising a combination of flufenacet and glyphosate, for weed control. Feucht provides an example of a post emergence greenhouse test wherein the combination of glyphosate and flufenacet is applied to weeds. Notwithstanding that one of ordinary skill may consider the reported results to be “questionable” (insofar as the glyphosate treatment alone – which would normally damage these species – does not appear to confer any damage) it can be seen that the combination – even when

tested under ideal greenhouse conditions (rather than the more harsh environment of an actual corn field) – did not provide complete control of the weed species tested.

As the Examiner points out - Feucht does not teach a 2-(substituted benzoyl)-1,3-cyclohexanedione or metal chelate. However, this deficiency, the Examiner suggests, can be cured by the teachings of Armel. More particularly, the Examiner suggests that one of ordinary skill in the art would have been motivated to incorporate a 2-(substituted benzoyl)-1,3-cyclohexanedione into the formulation by Feucht because mesotrione is known for post-emergence application to crops for the control of weeds.

However –the present claims are drawn to a method for the season-long control of unwanted vegetation, said method comprising a single post-emergence application of a herbicidal combination - rather than to the combination per se.

It should be appreciated that - Armel – while referring to 2-(substituted benzoyl)-1,3-cyclohexanedione (mesotrione) – does not envisage a single post-emergence application of mesotrione. In all cases Armel requires a pre-emergence application of mesotrione (or another herbicide) in order to control the weeds. Indeed the teaching of Armel clearly suggests that effective weed control requires both pre- and post- application of mesotrione (see e.g abstract final sentence). Thus – Armel does not any specific and unambiguous teaching with respect to a method of weed control comprising a single post emergence application of a herbicidal combination comprising mesotrione.

Accordingly, even if one of ordinary skill combined the teachings of Feucht and Armel in the manner suggested by the Examiner, the method of the present invention would not be arrived at. Furthermore, it is clear that the data provided with regard to the present invention clearly shows that the method of the present invention provides more effective season-long weed control.

Accordingly, Applicants respectfully submit that the method of the present invention is not *prima facie* obvious in view of the combined teachings of Feucht and Armel. Reconsideration and withdrawal of such § are respectfully requested.

The Examiner has further rejected claims 1-9, 15 and 18 under 35 U.S.C § 103(a) as being unpatentable over Hudetz (US 5981432). Applicants respectfully traverse this rejection.

Hudetz only exemplifies using pre-emergence treatment (Example B2) and pre- and post-emergence treatment (Example B3). No specific exemplification is provided in respect of a post-treatment (only generalised teaching in B1). Moreover – none of the specific examples provided teach a combination comprising a 2-(substituted benzoyl)-1,3-cyclohexanedione, glyphosate or a salt thereof and an acetamide. Accordingly, while the individual herbicidal components may be referred to by Hudetz – there is no teaching or suggestion of the 3-way combination. Such a combination is clearly only apparent following an improper hindsight reconstruction of the invention based on the disclosure of Hudetz. Furthermore, Hudetz clearly motivates a pre- or post- + pre-emergence application (as opposed to a post-emergence application alone) – and certainly does not envisage a method for season long weed control comprising a single post-emergence application.

Accordingly, reconsideration and withdrawal of the § 103 rejection of claims 1-9, 15 and 18 as being *prima facie* obviousness in view of Hudetz are requested; the rejection is based on an improper hindsight reconstruction of the prior art.

In view of the foregoing amendments and remarks, Applicants submit that the claims are in condition for allowance. Reconsideration and withdrawal of all rejections are respectfully requested, along with the issuance of a Notice of Allowance.

Respectfully submitted,

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